# Strategic Goals for CFSv3: A Climate Goal Perspective



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## **Selected Strategic Priority Issues for CFSv3**

Provides an important scientific basis for iterative risk management for adaptation.

Provides an important scientific basis for private sector supply

chain disruptions

- Helps provide insight and justification for observing system assets, e.g., frequency and diversity of GCOS ECVs.
- Is an operational system that delivers timely information on broadly advertised schedules.
- Open source and flexible that can incorporate new and more realistic Earth System – human components





# **New Modeling Challenges for CFSv3**

### **Atmospheric chemistry**



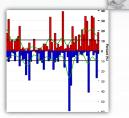
- Ozone forcings
- Aerosols
  - > Black Carbon
  - > Sulfate
  - > Volcanic aerosols



## **Stratosphere**







#### **Land Surface Processes**

- Irrigation
- New hybrid crops



Thickness and extent







# **New Modeling Challenges for CFSv3**





#### **Assimilation Issues**

- Aerosol Emissions
- Soil moisture
- Crop maturity
- Salinity
- SSU (upper stratosphere)





- Process to incorporate Process modules
  - Testing
  - Validation



#### Partnerships

- Governing Process
  - NOAA cross line office
  - Cross Agency
  - Academia
  - Private Sector

